If, secondly, we look for the aptitudes which the Tuareg have for working these different raw materials, we notice that their enumeration follows the same order as above, with the reservation that none of them know how to work metals. The latter occupations are the prerogative of the Enaden, that is to say, the artisans, and it is evident from this that without the artisans' help Tuareg industry would be limited to work in wood, leather, and esparto. In short, it is the cultural cycle of the pastoral peoples of the steppe.

It is only much later, when the Tuareg had integrated the Enaden with their social organization, that they used metals. Therefore, we perceive the considerable role which artisans must have played in technical evolution and that of art itself.

Fig. 46. Wooden funnel.

/277/ The presence of Enaden in the camps has reduced the manual labor of the Tuareg, but the latter are still able to make wooden articles -- milking vessels, bowls, tent stakes, etc.

One of their most curious customs is that women from the high nobility work wooden vessels and funnels with their hands by means of a little adze. They usually give them to the wives of their Imrad, who are very appreciative of these gifts. In the Ahaggar camps we found many little utensils which were the work of famous noble-women, of tamenokalin whose names are piously kept; these objects were saved with much veneration. This custom is even more remarkable since we know the scorn that the Tuareg have for manual labor; we must see in it a relic of woodworking which must formerly have been everyone's work, without distinction, before the creation of the artisan class.

coins were for a long time the money standard in all of Central Africa. (1) Copper is chiefly furnished by cartridge cases, and iron by abandoned

1. The Maria Theresa dollar was introduced into Africa at the beginning of the nineteenth century by navigators

Fig. 49. Double forge bellows.

and traders who visited the Gulf of Guinea. With the iron bar, it became the basis of commercial exchange, and it was circulated in the interior of West Africa as well as in Abyssinia.

scraps of old carriages, auto springs, sheet metal, tin cans, etc.

Aluminum, which is beginning to penetrate into the Niger region, is not yet utilized in the Ahaggar. So far the pipes and guys left to the four corners of the desert by wrecked airplanes have served only to make tent poles.

326 [301] /280/ Silver is used to make jewelry--pendants, pendants for the hair, bracelets, rings, earrings, amulet cases, etc.

Copper furnishes a number of more important and naturally more commonly used articles -- saddlery articles, cavessons for camels, highly ornamented padlocks with keys, hair knives, etc. This metal is generally better worked than silver. It is often chiseled, engraved, and topped with applications of tin by a technique which is reminiscent of damascening. Various articles, little knives, or medical cases bear inlays of copper on iron.

[493] 414 [412] [531]

Fig. 50. Hammer.

325 Copper and silver are cast in little terra cotta crucibles, and the high temperature needed to melt them is obtained by a forge with a double hand bellows or with a single bellows of the kind used by the Saharian Arabs and the Sudanese.

Fig. 51. Blacksmith's tongs.

438 326 411 The Ahaggar Enaden do not manufacture arms; they merely repair them. Sahara, daggers, and lances were for the most part manufactured by blacksmiths of the Kel Dinnik tribe (Ioullimmiden from Tahoua). Saber blades were imported from Rhat and mounted by the artisans. Lances came from the Kel Geres, where the Enaden of that group worked an iron mine which is located beside the village of Tassaoua.

Only a few daggers were made in the Ahaggar.

323 [172] Pottery is in common use among the Tuareg. It is generally not in use among nomads. However, it has been widespread in the Sahara for a long time, for quantities of potsherds and fragments are found on the regoliths /regs/ which are subsequent to the Neolithic period. Furthermore, its use is becoming more and more generalized in the camps.